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NOTICE OF ALLOWANCE AND FEE(S) DUE

30593 7590 08/04/2011 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195 EXAMINER

ALUNKAL, THOMAS D

ART UNIT PAPER NUMBER

2627

DATE MAILED: 08/04/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,992	03/02/2004	Sang Woon Suh	1740-000038/US	9678

TITLE OF INVENTION: RECORDING MEDIUM WITH RESTRICTED PLAYBACK FEATURE AND APPARATUS AND METHODS FOR FORMING, RECORDING, AND REPRODUCING THE RECORDING MEDIUM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	11/04/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED.</u> SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

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If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents
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appropriate. All further of indicated unless correcte maintenance fee notificat	ed below or directed oth	or transmitting the 1550 ing the Patent, advance or nerwise in Block 1, by (a	rders and notification of n a) specifying a new corres	naintenance fees wi spondence address;	ll be mai and/or (b	iled to the current of indicating a separ	correspondence address as ate "FEE ADDRESS" for	
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							(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNI	EY DOCKET NO.	CONFIRMATION NO.	
10/789,992	03/02/2004	•	Sang Woon Suh	•	1740	0-000038/US	9678	
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APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE T	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1510	\$300	\$0		\$1810	11/04/2011	
EXAM	INER	ART UNIT	CLASS-SUBCLASS]				
ALUNKAL,	THOMAS D	2627	369-053210	•				
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CFR 1.363).	ondence address (or Cha	nge of Correspondence	(1) the names of up to or agents OR, alternative	3 registered patent	attorneys	1		
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. ☐ "Fee Address" indication (or "Fee Address" Indication form			(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to					
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			ΓΗΕ PATENT (print or typ					
PLEASE NOTE: Unle recordation as set forth	ess an assignee is ident n in 37 CFR 3.11. Comp	ified below, no assignee pletion of this form is NO	data will appear on the pa T a substitute for filing an	atent. If an assigned assignment.	e is ident	ified below, the do	cument has been filed for	
(A) NAME OF ASSIC	GNEE		(B) RESIDENCE: (CITY	and STATE OR CO	DUNTRY	7)		
Please check the appropri	ate assignee category or	categories (will not be pr	rinted on the patent): \Box	Individual 🖵 Cor	poration	or other private grou	p entity 🚨 Government	
4a. The following fee(s) a	are submitted:	<i>Δ</i> 1-	o. Payment of Fee(s): (Plea	sca first raannly any	z previou	uely naid icena faa e	nown above)	
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	o small entity discount p		Payment by credit card. Form PTO-2038 is attached.					
Advance Order - # of Copies			☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).					
5. Change in Entity Stat	tus (from status indicated	d above)						
**	s SMALL ENTITY statu		b. Applicant is no long	•				
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if requeecords of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than the Office.	he applicant; a regist	tered atto	rney or agent; or the	assignee or other party in	
Authorized Signature				Date				
Typed or printed name				Registration No)			
This collection of information application. Confident submitting the completed this form and/or suggestions V. Alexandria, V.	ation is required by 37 C iality is governed by 35 I application form to the ons for reducing this bu- irginia 22313-1450 DO	CFR 1.311. The information U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the DNOT SEND FEES OR CONTROLL TO NOT	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	retain a benefit by the imated to take 12 m ridual case. Any con er, U.S. Patent and T D THIS ADDRESS	e public vinutes to nments or rademark	which is to file (and complete, including n the amount of tim office, U.S. Depar O: Commissioner fo	by the USPTO to process) gathering, preparing, and e you require to complete tment of Commerce, P.O. or Patents. P.O. Box 1450	

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10/789,992	03/02/2004	Sang Woon Suh	1740-000038/US 9678		
30593 75	90 08/04/2011	EXAMINER			
HARNESS, DICKEY & PIERCE, P.L.C.			ALUNKAL, THOMAS D		
P.O. BOX 8910					
RESTON, VA 201	95		ART UNIT	PAPER NUMBER	
			2627		

DATE MAILED: 08/04/2011

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 22 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 22 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No.	Applicant(s)	
	10/789,992	SUH ET AL.	
Notice of Allowability	Examiner	Art Unit	
	THOMAS ALUNKAL	2627	
	THOWAS ALUNKAL	2027	
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in or other appropriate commits IGHTS. This application is	n this application. If not included unication will be mailed in due cour	se. THIS
1. \boxtimes This communication is responsive to <u>amendment filed 7/2.</u>	<u>7/2011</u> .		
2. \boxtimes The allowed claim(s) is/are <u>13,17,19,20,24,41,42,45,46 and 18.5.</u>	nd 49-51.		
 3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 		or (f).	
□ Certified copies of the priority documents have □ Certified copies of the priority documents have		on No	
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3. Copies of the certified copies of the priority do	cuments have been receive	d in this national stage application	Irom the
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the require	ments
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			CE OF
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.		
(a) ☐ including changes required by the Notice of Draftspers	son's Patent Drawing Revie	w (PTO-948) attached	
1) ☐ hereto or 2) ☐ to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment o	r in the Office action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			k) of
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT			the
Attachment(s)	5 D Nation of It	afayyaal Dahamb Ayyuliaabiaya	
1. Notice of References Cited (PTO-892)		nformal Patent Application	
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	Paper No.	Summary (PTO-413), /Mail Date	
 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 	7. 🛚 Examiner's	Amendment/Comment	
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛛 Examiner's	Statement of Reasons for Allowan	ce
=	9. 🗌 Other	<u>_</u> .	
/Thomas D Alunkal/	/Wayne Young	<u>,</u>	
Examiner, Art Unit 2627	Supervisory Pa	itent Examiner, Art Unit 2627	

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/16/2011 has been entered.

Response to Arguments

Applicant's arguments, see Remarks, filed 6/16/2011 and 7/27/2011, with respect to claims 13, 17, 19-20, 24, 41-42, 45-46, and 49-51 have been fully considered and are persuasive. The previous grounds of rejection have been withdrawn.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gary Yacura (Reg. No. 35,416) on 7/28/2011.

In the claims:

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In claim 24, please replace the recitation "The method of claim 23" with -- The method of claim 20 --.

In claim 45, please replace the recitation "The apparatus of claim 44" with -- The apparatus of claim 42 --.

Allowable Subject Matter

Claims 13, 17, 19-20, 24, 41-42, 45-46, and 49-51 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claims 13, 20, 42, and 49.

Regarding independent claim 13, the prior art taken either singularly or in combination fails to anticipate or fairly suggest a method of forming a recording medium, comprising: forming an information area for recording disc management information and/or data; recording disc identification information identifying a type of computer readable medium in an area preceding the lead-in area, the type being selected from a set of media types, the set of media type including Read-only, Recordable and Rewritable type; and the disc identification information being formed as a physical mark, the physical mark being a pit type, the pit type selected from at least one of wobbled pits and straight pits, wherein the physical mark provides control information for controlling a reproduction of data recorded as straight pits on a data area of the recording medium and is formed along a modulated unique pattern, wherein if the pit type is wobbled pits, at least a part of

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the wobbled pits forming the physical mark is shifted from a central line of the wobbled pits, and wherein the modulated unique pattern represents encryption information used in encrypting data of the data area.

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Regarding independent claim 20, the prior art taken either singularly or in combination fails to anticipate or fairly suggest a method of reproducing data from a recording medium, including a lead-in area, a data area and a lead-out area, comprising: detecting physical mark information recorded as a pit type from an area preceding the lead-in area, the physical mark information representing disc identification information identifying a type of computer readable medium, the pit type having been selected from at least one of wobbled pits and straight pits in the area preceding the lead-in area that is not writable by end user recorders, the type being selected from a set of media types, the set of media types including one of Read-Only, Recordable, and Rewritable type, the physical mark information being formed along a modulated unique pattern, wherein if the pit type was wobbled pits, at least a part of the wobbled pits forming the physical mark information is shifted from a central line of the wobbled pits; and controlling a reproduction of data recorded as straight pits from the data area based on the detected physical mark information.

Regarding independent claim 42, the prior art taken either singularly or in combination fails to anticipate or fairly suggest an apparatus for reproducing data from a recording medium including a lead-in area, a data area and a lead-out area, comprising: an optical pickup configured to detect physical mark information recorded as a

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pit type from an area preceding the lead-in area, the physical mark information representing disc identification information identifying a type of recording medium, the pit type selected from at least one of wobbled pits and straight pits in the area preceding the lead-in area that is not writable by end user recorders, the type being selected from a set of media types, the set of media types including one of Read-Only, Recordable and Rewritable type, the physical mark information being formed along a modulated unique pattern, wherein if the pit type is wobbled pits, at least a part of the wobbled pits forming the physical mark information is shifted from a central line of the wobbled pits; and a controller configured to control a reproduction of data recorded as straight pits from the data based on the detected physical mark information.

Regarding independent claim 49, the prior art taken either singularly or in combination fails to anticipate or fairly suggest a method of forming a recording medium, comprising: forming an information area for recording disc management information and/or data; and forming physical mark information as a pit type, the pit type selected from at least one of wobbled pits and straight pits in an area preceding a lead-in area of the recording medium, wherein the physical mark information provides control information for controlling a reproduction of data recorded as straight pits on a data area of the recording medium and is formed along a modulated unique pattern, wherein if the pits type selected is wobbled pits, at least a part of the wobbled pits forming the physical mark information wobble in a non-overlapping manner with respect to a central line of the wobbled

pits, and wherein the modulated unique pattern represents encryption information used in encrypting data of the data area, the physical mark information identifying a type of the recording medium, the type being selected from a set of media types, the set of media types including one of Read-Only, Recordable, and Rewritable.

Dependent claims 17, 19, 24, 41, 45, 46, 50, and 51.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sako (US PgPub 2002/0181705) discloses a data output method. Yamaguchi et al (US PgPub 2002/0015379) discloses an optical recording medium. Yamada (US PgPub 2003/0218950) discloses a reproducing apparatus. Kadowaki et al. (US PgPub 2004/0001414) discloses a storage medium. Takemura et al. (US 5,809,007) discloses an optical disk.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS ALUNKAL whose telephone number is (571)270-1127. The examiner can normally be reached on M-F 7:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571)272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas D Alunkal/ Examiner, Art Unit 2627

/Wayne Young/ Supervisory Patent Examiner, Art Unit 2627 Application/Control Number: 10/789,992

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